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Two new species of *Discomorpha* CHEVROLAT, 1837 from Brazil (Coleoptera: Chrysomelidae: Cassidinae)

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ABSTRACT. *Discomorpha santaremi* n. sp. and *Discomorpha davidsoni* n. sp. are described from Brazil. Both belong to the nominotypical subgenus.

Key words: entomology, taxonomy, new species, Coleoptera, Chrysomelidae, Cassidinae, *Discomorpha*, Neotropics.

The genus *Discomorpha* CHEVROLAT, 1837 comprises 57 species grouped into three subgenera (VIANA 1964). They have never been revised, but most species are well-defined by their characteristic colour and sculpture. In the material studied recently we found specimens of two new species. Their description is given below.

Discomorpha santaremi n. sp.

ETYMOLOGY

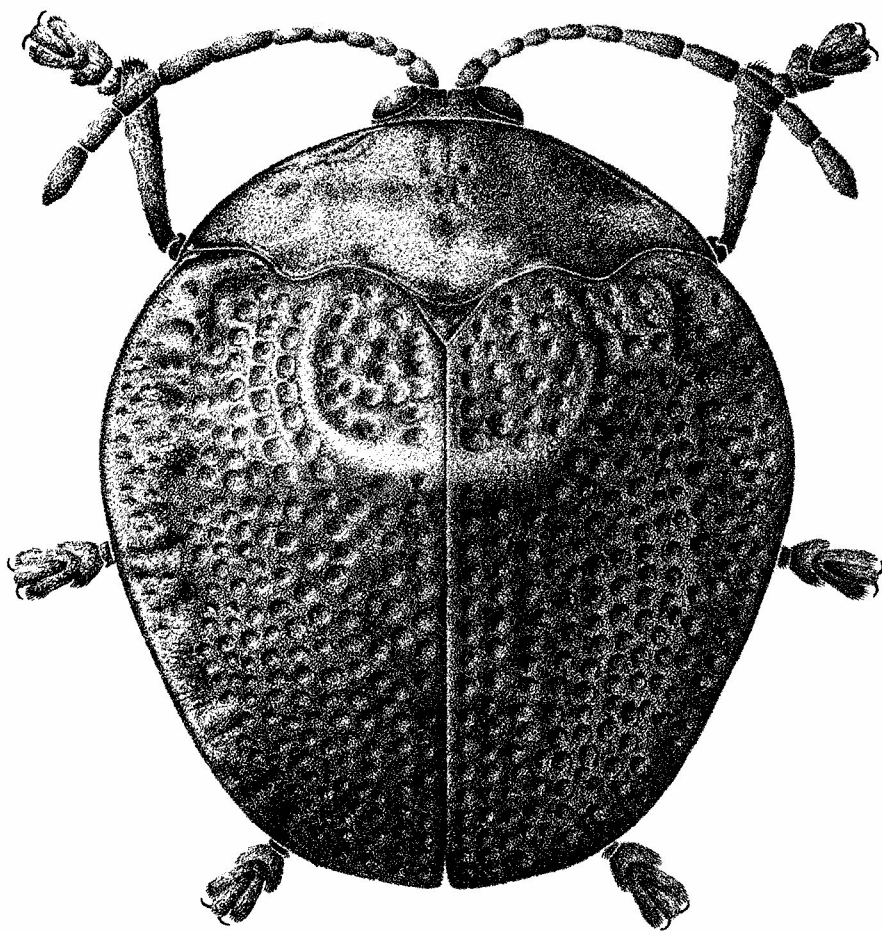
Named after its locus typicus, Santarem in Pará Province of Brazil.

DIAGNOSIS

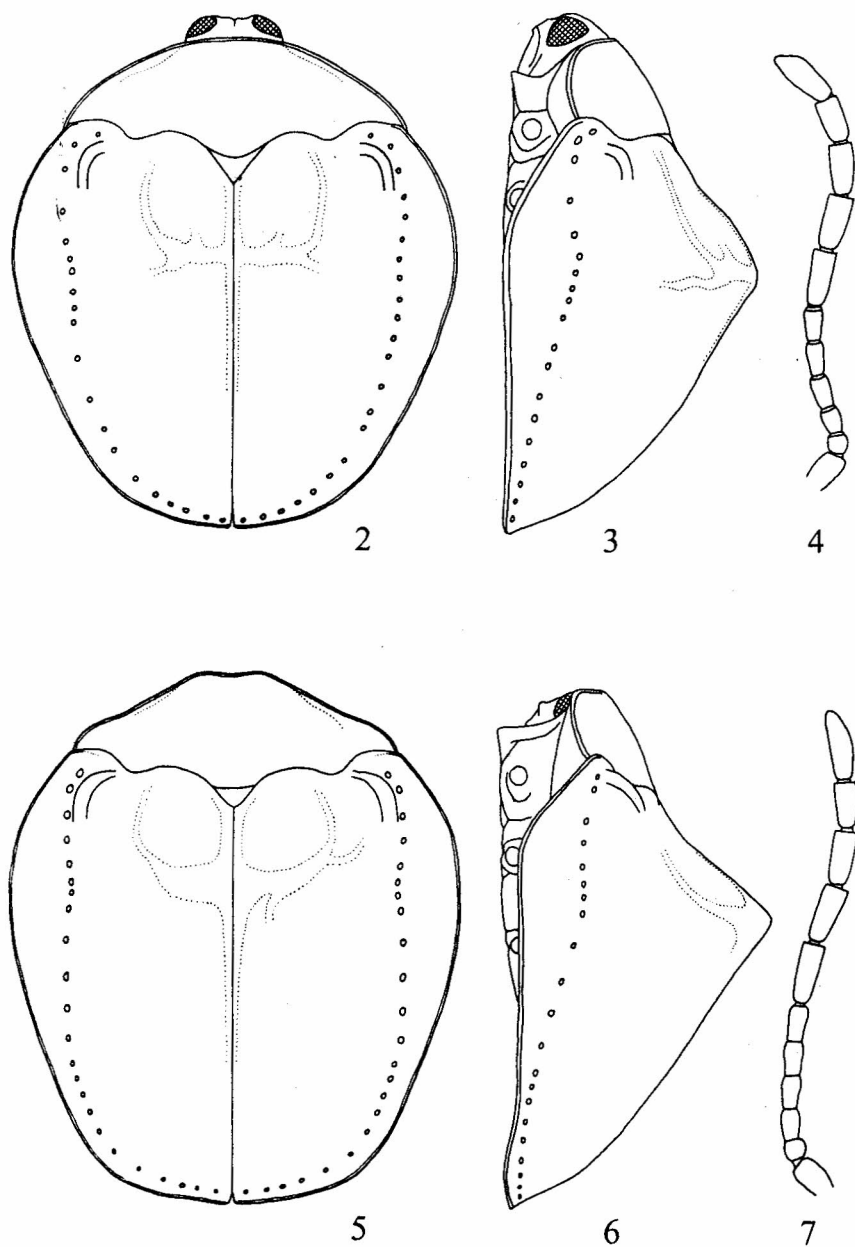
Uniformly metallic green pronotum and elytra, and extremely dense and large elytral puncturation near this species only to *D. metallica* (GUERIN) from Bolivia and Mato Grosso in Brazil. *D. metallica* differs in a larger body size (length in male above 12.5 mm, in female above 13.2 mm) and especially in a larger, more angulate postscutellar tubercle (figs 3, 6).

DESCRIPTION

Length (without head): male: 10.5-11.3 mm, female: 12.4-13.0 mm, width: male: 9.5-10.3 mm, female: 10.1-10.9 mm, length of pronotum: male: 2.4-3.0 mm, female: 2.7-3.2 mm, width of pronotum: male: 6.7-7.3 mm, female: 7.5-8.2 mm, length/width ratio: male: 1.09-1.16, female: 1.18-1.22, pronotal width/pronotal length ratio: male: 2.43-2.79, female: 2.48-2.89.



1. *Discomorpha santaremi*: habitus (by A. DĄBROWSKA)



2-4. *Discomorpha santaremi*, 5-7. *Discomorpha metallica*: 2, 5 - body outline, 3, 6 - body in profile, 4, 7 - antenna

Pronotum and elytra metallic green, in three specimens green with blue tint, only apex of postscutellar tubercle in some specimens with small reddish spot, lateral margin of elytra in many specimens cupreous. Head and ventrites black with green metallic tint. Antennae uniformly black or six basal segments metallic green.

Upperside unpubescent.

Pronotum trapezoidal, anterior margin straight or very shallowly emarginate, sides straight or slightly convex, strongly converging anterad. Disc moderately convex, not or very shallowly impressed on sides and in front of scutellum, along the middle with more or less developed glabrous carina, which is often prolonged in posterior half in median sulcus, its surface dull, with distinct microsculpture and extremely fine pricks; explanate margin indistinctly bordered from disc, dull, microsculptured, impunctate. Lateral margin slightly elevated, especially in females, the elevation in some specimens obsolete in basal corners of pronotum.

Scutellum triangular. Elytra moderately broad, in male slightly stouter than in female, with maximum width in female at 1/3 and in male at 2/5 length, then moderately converging posterad (fig. 2). Disc with moderately large, obtuse postscutellar tubercle (fig. 3), the tubercle on sides without carinae, postscutellar impression only slightly defined, on sides without marginal fold. Puncturation coarse, deep, and dense, intervals narrow, flat, do not form a reticulation. Surface of intervals mostly glabrous with indistinct microreticulation, surface of punctures dull and microsculptured. Marginal row distinct. Explanate margin moderately declivous, moderately broad, its surface dull, microreticulate, with sparse, small puncturation but, close to punctures of marginal row, with a row of large punctures and short but deep transverse furrows. Margin elevated only in its basal part, its fore-part forms a tubercle. Epipleuron in posterior half very narrow, its interior margin moderately elevated, ending in apex, surface in apical part in both sexes with sparse erected hairs but in most dried specimens hairs are broken and epipleuron appears bare.

Head with sharp frontal groove ending at vertex in oval, deep impression. Clypeus strongly elevated, labrum transversely impressed. Antennae with six basal glabrous and five distal dull segments. Length ratio of segments in male: 100:51:81:92:97:81:170:146:146:116:176 (fig. 4), in female: 100:51:73:92:86:76:159:140:135:135:154. Last segment in male with outer margin more curved than in female and apex with brush of long hair.

Ventrites without diagnostic characters.

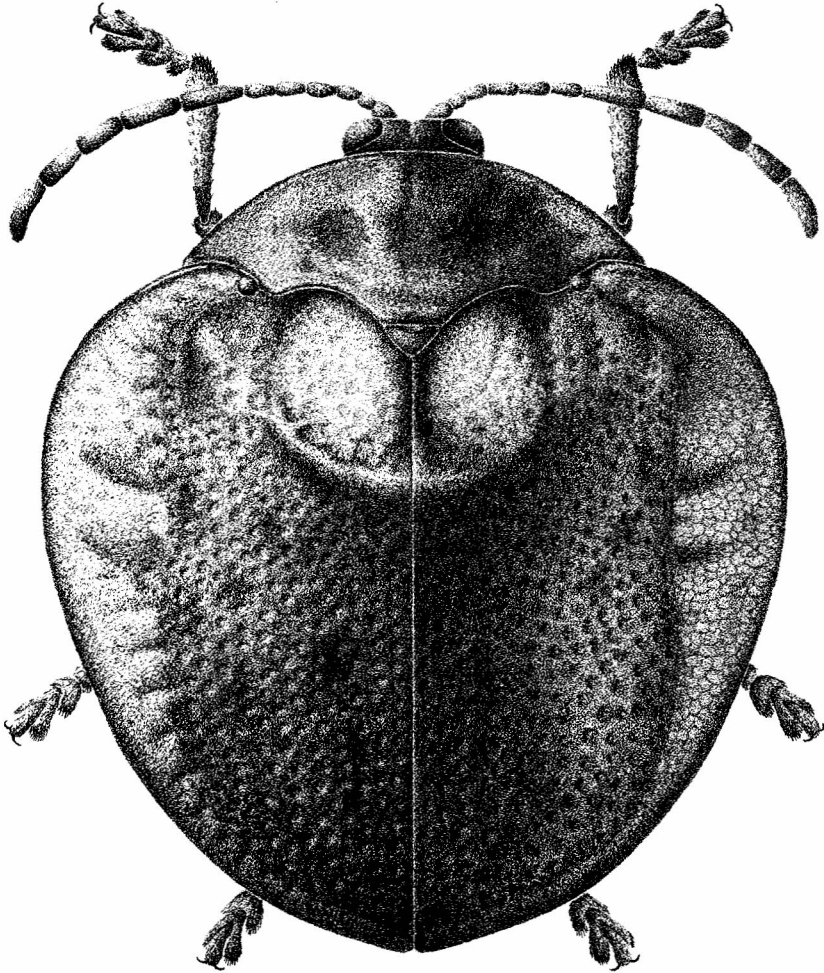
MATERIAL EXAMINED

Holotype male: "Santarem Brazil" "KLAGES Coll'n. Exot. Coleopt. C. M. Acc. 2275"; 3 male and 3 female paratypes: same data; 1 male and 2 female paratypes: same data but "Acc. No. 2966"; 2 male and 2 female paratypes: "Taperina Brazil" "Acc. No. 2966"; paratype female: "Brazil" "Lago Mamouru, Para, coll. LEMOULT"; all localities are situated in Para Province, at the mouth of Tapajos Riv. to Amazonas Riv. (holotype and 11 paratypes at Carnegie Museum, Pittsburgh, USA, one paratype in Institut Royal des Sciences Naturelles, Bruxelles, Belgique, three paratypes in the collection of senior author, Wrocław, Poland).

Discomorpha davidsoni n. sp.

ETYMOLOGY

Dedicated to Dr. R. DAVIDSON, the curator of *Coleoptera* collection at the Carnegie Museum, who sent us the type specimen of this beautiful species.



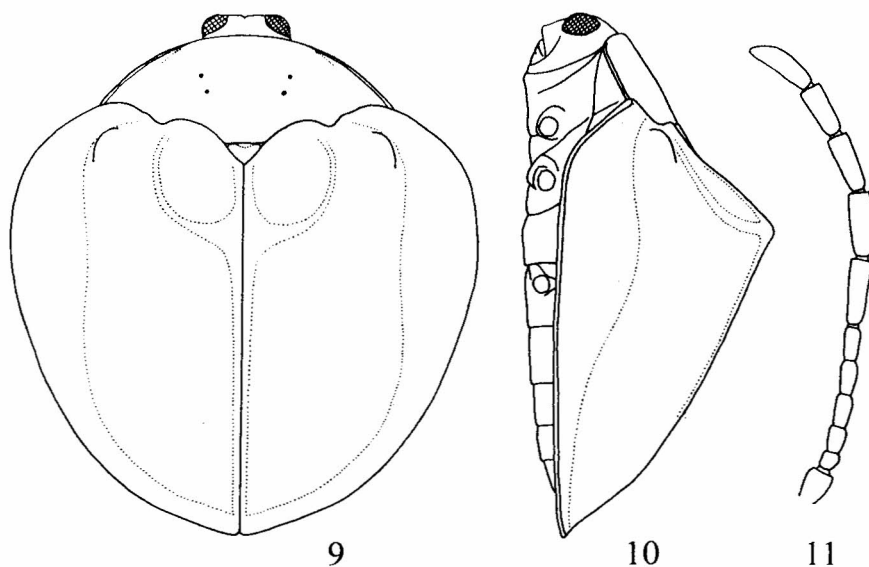
8. *Discomorpha davidsoni*: habitus (by A. DABROWSKA)

DIAGNOSIS

It is a unique species, the only one in the nominotypical subgenus with red pronotum marked by two black spots and mostly red upperside.

DESCRIPTION

Length (without head): male: 12.4 mm, female: 14.6-14.8 mm, width: male: 12.2 mm, female: 13.6-13.8 mm, length of pronotum: male: 2.9 mm, female: 3.3-3.5 mm, width of pronotum: male: 7.6 mm, female: 8.8-9.2 mm, length/width ratio: male: 1.02, female: 1.07, pronotal width/pronotal length ratio: male: 2.62, female: 2.67-2.79.



9-11. *Discomorpha davidsoni*: 9 - body outline, 10 - body in profile, 11 - antenna

Pronotum dark red, disc with two large, round, black spots. Scutellum dark red. Elytra mostly dark red, disc marked with black spots, one at humerus, four round in posthumeral area and several in posterior half of disc, partly coalescent and forming irregular reticulation; explanate margin mostly dark red with three to four black spots along internal margin: first small, round, close to humerus (in two examined specimens it is obsolete), second transverse, in all specimens extending behind half width of explanate margin, third transverse but c. twice shorter than the second, both

situated anterior to the middle of explanate margin, fourth round, located distinctly behind the middle of explanate margin. Suture, basal and lateral margin of elytra black, in one specimen also elevated margin of postscutellar impression partly black. All black markings in side light with a slight metallic tint. Head and ventrites dark red, lateral part of metathorax and sternites sometimes darkened, brownish-red to blackish, also tarsi sometimes partly infusate. Antennae black, first two segments on underside or completely reddish.

Upperside unpubescent.

Pronotum trapezial, anterior margin shallowly emarginate, sides straight or slightly convex, strongly converging anterad. Disc moderately convex, shallowly impressed on sides and in front of scutellum, along the middle with more or less developed glabrous fold, its surface dull, with distinct microreticulation and extremely fine pricks; explanate margin indistinctly bordered from disc, dull, microreticulate, impunctate. Lateral margin slightly elevated, the elevation in some specimens obsolete in basal corners of pronotum.

Scutellum triangular. Elytra moderately broad, in male only slightly wider than in female, with maximum width in female at 2/7 and in male at 1/3 length then moderately converging posterad (fig. 9). Disc with large, angulate postscutellar tubercle (fig. 10), the tubercle on sides without carinae or it is very low and obtuse, postscutellar impression only poorly defined on sides without or with very low and obtuse marginal fold. Puncturation moderately coarse, shallow, intervals narrow, slightly convex, forming indistinct reticulation. Surface of intervals mostly dull, partly slightly glabrous, microreticulate, surface of punctures dull. Marginal row distinct. Explanate margin moderately declivous, its surface dull, microreticulate, impunctate, only close to punctures of marginal row with short transverse furrows. Margin elevated only in its basal part, its anterior part forms a tubercle. Epipleuron in posterior half very narrow, its interior margin strongly elevated, ending somewhat anterior to apex, surface in apical part in both sexes with sparse erect hairs.

Head with sharp frontal groove ending at vertex in oval, deep impression. Clypeus strongly elevated, labrum in the middle with round, deep impression. Antennae with six basal glabrous and five distal dull segments. Length ratio of segments in male: 100:47:86:95:95:90:211:184:181:160:232 (fig. 11), in female: 100:42:73:88:85:81:206:171:163:142:175. Last segment in male with outer margin more curved than in female and apex with brush of long hair.

Ventrites without diagnostic characters.

MATERIAL EXAMINED

Holotype female: "Chapada Brazil Acc. No. 2966" "Nov."; Paratype male and paratype female "Brazil, Mato Grosso, Chapada Plateau, IX 1985, native collector" (holotype in Carnegie Museum, Pittsburg, USA, paratypes in the collection of senior author, Wrocław, Poland).

ACKNOWLEDGEMENTS

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